From: C HOFFNER
To: Microsoft ATR
Date: 12/17/01 5:57pm
Subject: Microsoft Settlement

Dear Renata B. Hesse,

(A Problem - Partial Standards)

Standards are rules system components must embody to
interact correctly with other components. Without
standards it is impossible to build a new component
to extend or upgrade the original system.

Components of the DOS and Windows operating systems
are at three levels. The drivers at the bottom level
include the hardware interface. The applications at
the top level include the user interface.

There are three areas where the software industry
depends on standards to ensure aftermarket products
are compatible. These three areas are file formats,
application interfaces, and communication protocols.

The de jure standards defined by the CCITT and similar
bodies inherently promote competition. On the other
hand, the de facto standards defined by the Microsoft
monopoly effectively stifle competition.

In the telecommunications industry, de jure standards
have become a part of the culture. In fact, de facto
standards are not viewed as standards at all since
they change at the dictates of a single company.

The de facto standards from Microsoft stand in stark
contrast to those from AT&T and IBM. Entire books have
been written on undocumented DOS and Windows. Missing
information is only found by reverse engineering.

It is not that Microsoft fails to provide details of
the standards it defines. It is rather that they are
all too often incomplete and inaccurate. Something
must be done to level the playing field.

(A Solution - Improved Disclosure)

Before computer programmers write any code, systems
engineers write a set of specifications. Among other
things, these spell out the standards, both de facto

and de jure, the software must implement.

Because communications protocols found in Microsoft products are those drafted by standards bodies in the telecommunications industry, complete and accurate documentation is available to competitors.

This is not the case with the documentation for file formats and application interfaces. In fact, it is sometimes necessary to find what works by trial and error. The result is unexplained failures.

Standards documents are of use to developers rather than end-users. They should be tracked and updated in a manner consistent with industry practice. The consumer benefit is higher quality products.

Changes to file formats and application interfaces may be made late in the development cycle. A product group that is ISO-9001 certified will have procedures for updating the specifications accordingly.

To ensure responsible use of its de facto standards:
(1) Order Microsoft to seek ISO-9001 certification.
(2) Order Microsoft to provide missing information.
(3) Impose harsh fines for repeated non-compliance.

Improving disclosure of de facto standards is not all that is needed. It is a problem by itself, but only a part of the broader problem. But here, the example of AT&T and IBM can help in fashioning a solution.

Sincerely, Charles W. Hoffner